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| APPLICATION NO.      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-------------|----------------------|---------------------|------------------|
| 10/640,986           | 08/14/2003  | Timothy J. Brennan   | EP-7606             | 9218             |
| 34769                | 7590        | 08/28/2006           | EXAMINER            |                  |
| TOOMER, CEPHIA D     |             |                      |                     |                  |
| 330 SOUTH 4TH STREET |             |                      | ART UNIT            | PAPER NUMBER     |
| RICHMOND, VA 23219   |             |                      | 1714                |                  |

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |                     |  |
|------------------------------|------------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>       | <b>Applicant(s)</b> |  |
|                              | 10/640,986                   | BRENNAN ET AL.      |  |
|                              | Examiner<br>Cephia D. Toomer | Art Unit<br>1714    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION**

This Office action is in response to the amendment filed June 2, 2006 in which claims 1 and 13 were amended.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2181607.

FR teaches a fuel composition comprising an Fe-based product or solution, such as iron naphthenate, as an additive. The Fe is preferably added to the fuel in the form of a solution containing 1-10 wt % (10-100 g/l) in combination with a solvent having a flash point of greater than 65 C (149 F)(see abstract in its entirety). With respect to the cloud point, FR would inherently meet this limitation given that it teaches the same fuel composition.

Accordingly, FR teaching all the limitations of the claims anticipates the claims.

3. Claims 1-4, 6-8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by WO8700193.

WO teaches an additive for diesel fuel comprising iron naphthenate and a high boiling solvent(see abstract; page 2, lines 3-21). The solvent is a polyaromatic solvent

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such as anthracene oil. Anthracene oil has a boiling point of 330-400 C and a flash point of 180 degrees (see page 2, lines 22-26). The iron naphthenate is present in the additive in an amount of up to 90 liters and in the fuel in amount up to 0.05 kg/ton fuel (see page 3, lines 18-28; page 4, lines 3-19; Examples 1-3). With respect to the flash point, WO '193 inherently meets this limitation given that it teaches the same fuel composition.

Accordingly, WO '193 teaching all the limitations of the claims anticipates the claims.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2181607.

FR has been discussed above. FR fails to teach that the solvent is aromatic. However, no unobviousness is seen in this difference because the teaching of hydrocarbon solvents suggests that the solvent may be aromatic.

FR fails to teach that the additive is adapted for diesel fuel. However, no unobviousness is seen in this difference because FR teaches that the additive of its invention is suitable for a liquid fuel and this teaching suggests diesel fuel.

6. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2181607 in view of WO 0188362 and SOLVESSO 150.

FR has been discussed above. FR fails to teach the particulars regarding the solvent or that the solvent is aromatic. However, WO teaches that organic solvents such as aromatic hydrocarbons such as SOLVESSO products are used for incorporating metal compounds into bulk fuel (see page 29, lines 13-26). SOLVESSO 150 is an aromatic solvent that boils with the range of 183-207 C has a flash point of 66 C and a viscosity at 25 C of 1.21. See product data sheet.

It would have been obvious to one of ordinary skill in the art to select the claimed solvent because FR desires a hydrocarbon solvent, WO teaches that aromatic hydrocarbon solvents such as SOLVESSO are used to incorporate metal compounds into bulk fuel and SOLVESSO 150 meets these requirements. SOLVESSO does not specifically teach the molecular weight of the solvent; however, it would be reasonable to expect that the solvent would meet this limitation because it possesses all of the other properties that the solvent of the present invention contains.

7. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that the prior art fails to teach that the additive possesses a cloud point less than -40 °C.

FR '607 and WO'193 teach the same additive as set forth in the present claims. Therefore, the prior art would inherently meet this limitation.

Applicant argues that the additive of FR '607 and WO '193 is best suited for modern emission control systems and that the prior art does not mention such systems because such systems did not exist in 1974 and 1985.

Applicant's claims are directed a combustion additive and not to the system. The claims as drafted are anticipated by FR '607 and WO '193 and applicant's arguments regarding the types of system the additives are used are irrelevant.

Applicant argues that WO '362 and SOLVESSO 150 is improper hindsight.

WO '362 was not cited for teaching that organic solvents such as SOLVESSO are used for incorporating metal compounds into bulk fuel. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

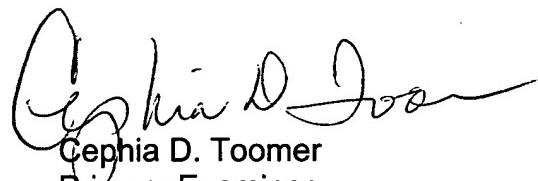
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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